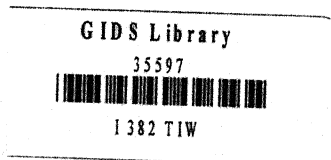# Trade Cooperation Among Newly Industrialising Developing Countries : Principles and Policy Options

R. S. Tiwari

GIRI INSTITUTE OF DEVELOPMENT STUDIES
SECTOR O, ALIGANJ HOUSING SCHEME
LUCKNOW-226 024

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TRADE COOPERATION AMONG NEWLY INDUSTRIALISING DEVELOPING COUNTRIES: PRINCIPLES AND POLICY OPTIONS

R. S. TIWARI

GIRI INSTITUTE OF DEVELOPMENT STUDIES
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R.S.   Tiwari

I.   Introduction : Relevance of the Study

Corpus of literature on trade and development suggests the wide discrepancy in socio-economic development between developed and the developing economies.   Many developing

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industrialisation strategy by adopting internal production and trade policies, in which the key element was the growth of trade. Until mid 1960s, development process in many developing countries was characterised as inward-oriented, which laid emphasis on consolidation of internal production base through reoriention of indigenous investment, material resources, technological capability and the protective-induced measures, such as, tariffs, quota, taxes and exchange rate appreciation. It was but soon realised that such industries, which grew under protective regime of development also required inputs the demand for which could not be met through domestic sources alone. This, forced developing countries to enhance their import-capacity through increase in export. This is felt because if rising import is not matched by increasing export, the growth process is likely to be constrained by the balance of payment bottleneck, unless country opts to increase its dependence on foreign aid.

Since mid-1960s, emphasis, therefore, began to be placed on outward-looking export promotion strategy as a basis for industrial development. Such a strategy implied the exploitation of micro and macro economic efficiency by trading of efficiency of factors and commodities. The export promotion strategy though induced country's import-capacity but it was not, however, adequate to meet the import requirement needed for country's development. This was mainly due to the tariff and non-tariff barriers. Owing to these, many developing countries under various GATT Rounds,

UNCTAD Conferences and Uruguay Rounds demanded tariff and non-tariff concessions. However, demand for such concessions appeared no more than a psychological satisfaction. This was mainly because tariff and non-tariff concessions either ended at the stage of discussion and debate or the extent of such concessions thereunder was too insignificant to make any profound impact on the export prospect of developing into the developed countries. Owing to various restrictive clauses and safe guard actions, the impact of tariff and non-tariff barriers was less severe on exports from developed than to that from developing countries.

Apart from these, developed countries had also been successful in 'skipping over' the impact of tariff and non-tariffs through diversifying their products and markets, where as, developing countries could not be able to counter such adverse effects. Consequently, export prospect of developing into the developed countries appeared to be extremely dark and discouraging. Under these compulsive circumstances, developing countries were, therefore, compelled to seek alternative market outlets for their exports and hence trade among developing countries through trade cooperation came to be recognised as second best solution than to that between developed and the developing countries. Towards this direction, present study attempts at examining the certain principles as tool for enhancing the trade cooperation among newly industrialising developing countries through mutual cooperation.

So as to provide backdrop, study examines the trade performance of non-oil producing and exporting countries (NONOPEC), oil producing and exporting countries (OPEC), developing countries (DCs) and developed market economies (DMEs) from 1961 to 88 in terms of export performance. By using the trend regressions, general finding underlined the poor export performance record in the NONOPEC 'vis-a-vis.' the developed countries (Tiwari 1996:12-50). Thus, export performance from 1961 to 1988 was seen lagging behind in developing countries and NONOPEC 'vis-a-vis.' the developed countries. As for the trade flows, it witnessed improvement between the developing countries in non-traditional technology-intensive goods, like, chemicals (5.0), machinery and transport equipment (7.0) and miscellaneous manufactured articles (8.0), whereas, there was a deterioration in traditional resource-intensive goods. The poor export performance in developing countries resulted into the foreign exchange shortage, which, overtime deepened dependence on external assistance for economic development process. This alternatively implied the undesirably and heavy reliance on import linked foreign aid led growth strategy, which could be reverted back only if export performance could be accelerated through adopting economically viable and efficient trade and production policies conducive to country's factor endowment structure.

II. Comparative Advantage and Trade Cooperation

Theory of comparative advantage in its conventional and non-conventional treatment implies as to how the flows of trade between countries are determined by the micro and macro economic efficiency. It is, therefore, simply a transaction between efficiency and inefficiency of factors and commodities. Overtime, it has been noticed that share of export from traditional commodities declined, where as, that from non-traditional items improved in country's export basket. To explain this, the comparative advantage at 3 digit levels of SITC grouping by identifying the pattern of revealed comparative advantage has been examined.

The pattern of revealed comparative advantage reflecting the country's comparative advantage has been examined by using the export performance index (Balassa 1967:202-03). It reflects all types of costs and non-price factors "like good will, quality, service facilities, etc. Since this pattern in comparative advantage is revealed by the observed pattern of trade flows, it is called revealed comparative advantage. Thus, the increase in export performance index of the exporting country as compared to competitor country or country's group reflects the increase in exporting country due to the effect of revealed comparative advantage. The mean of revealed comparative advantage, a part from considering the 'relative cost element' also captures the differences in non-price factors (Panchmukhi 1973 : 65; Tiwari 'et al.', 1987 : 138-61; Tiwari 1996 : 71-72)). Thus,

this method takes into account the cost and non-price factors. The export performance index (Panchmukhi 1973 : 65) has, therefore, been employed which is worked out by using the following well known Balassa's method (Balassa 1967 :202-03):

$$EPI = \frac{1}{2}\left(\frac{eij\ (1)}{ej\ (1)} + \frac{eij\ (1)}{ej\ (1)} \middle/ \left(\frac{eij(1)}{ej\ (1)} \middle/ \frac{eij\ (0)}{ej\ (0)} \right) \right)$$

Where,

eij (0) = Average share of jth country in the total export of ith commodity in the base year;

ej (0) = Average share of all commodities of the exporting country in the base year;

eij (1) = Average share of jth country in the total export of ith commodity in the current year; and

ej (1) = Average share of all commodities of the exporting country in the current year.

The export performance index in the present study has been seperately worked out for each NICs (Argentina, Brazil, India, Israel, Korea Republic, Malaysia, Pakistan and Turkey). Each of the NICs has seperately been considered as exporting country, whereas, rest of the world as a unit of competitors. Present study covers the average of (1) 1969-72 to 1974-76, (2) 1974-76 to 1979-82 and (3) 1979-82 to 1984-87, which uses data at 3 digit levels of SITC groupings. Data

beyond this level are not found available on a consistent basis from the published sources. Commodity Trade Statistics, Year Book of International Trade Statistics by United Nations and Monthly Statistics of Foreign Trade of India by DGCI & S. Calcutta have been used as basic sources of information.

Based on the top 50 commodities revealed comparative advantage was found mainly confined on the traditional commodities, though products from non-traditional sector also portrayed the potential. This was found valid in 6, out of 8 NICs, 'vis-a-vis.' rest of the world during all periods considered. The pattern of revealed comparative advantage on traditional products was attributed primarily due to the nature of country's factor endowment structure, whereas, that on non-traditionals to the trade policy responses. Revealed comparative advantage was also examined in a dynamic framework. During 1969-72 - 1974-76, revealed comparative advantage 'vis-a-vis.' rest of the world on traditonal goods in Pakistan, Malaysia and Argentina was found shifted in favour of non-traditonal goods in 1974-76 to 1979-82, whereas, reverse was the case in Korea Republic and Turkey. Revealed comparative advantage in India, Brazil and Israel 'vis-a-vis.' rest of the world was, however, confined consistently on traditional goods during the first as well as in the second period.

During 1979-82 to 1984-87, there was a clear shift in revealed comparative advantage 'vis-a-vis.' rest of the world

from traditional to non-traditional commodities in Malaysia, Korea Republic and Turkey, where as, it was retained consistently in India, Brazil and Israel on traditional goods. Generally, there was a small gain in revealed comparative advantage in non-traditional goods compared with the traditional goods during 1974-76 to 1979-82 over the 1969-72 to 1974-76, while it was substantial on the traditional than the non-traditional goods during 1979-82 to 1984-87 over 1974-76 to 1979-82. Such a transformation of revealed comparative advantage as compared to rest of the world from traditional to non-traditional goods, more or less, implied the general applicability of 'product cycle theory' and Balassa's 'Stages of Comparative Advantage', whereas, those from non-traditional to traditional goods, the existence of factor proportion theory.

Question as to what extent have country's products possessed competitive ability has also been examined by using the difference in the ranks of export performance indices (Panchmukhi 1973). If the absolute difference in ranks between two export countries is less than 20, they are considered as keen competitors. Further, if difference of ranks is more than 20 but less than 40, they are considered as marginal competitors. However, if absolute difference in ranks is more than 40, they are considered as complementary countries. Also, if there exists only one either keen or marginal competitors, market is characterised as duopolistic. If the number of keen or marginal competitors exceeds to one

but less than four, the market is said to be oligopolistic. Finally, if the number of keen and marginal competitors are four or more, the market is described as perfectly competitive in character (Panchmukhi 1973). Although such a classification is somewhat arbitrary, this portrays the nature of competition product-wise among NICs.

Based on above methodology, it was revealed that oligopolistic competition characterised by cut-throat competition in terms of cost and price existed in majority of products, though there was some variations across NICs over different periods. For instance, during 1969-72 -1974-76, Korea Republic, Malaysia and Pakistan were seen facing oligopolistic competition, while Argentina, Brazil, India, Israel and Turkey faced the perfect competition. During 1974-76 - 1979-82, all NICs, except Malaysia had faced the oligopolistic market competition. During 1979-82 - 1984-87, a similar situation in Israel, Korea Republic, Malaysia and Pakistan also existed. On the other hand, perfect competition in Argentina and duopolistic competition in Brazil, India and Turkey were seen in existence.

Various products facing duopolistic competition in Brazil include : meat fresh, chilled, frozen (011), other cereal, meals flour (047), sugar and honey (061), coffee and substitutes (071), iron ore concentrates (281), fixed vegetable oil, soft (423), paper, etc. pre cut arts of (642), iron, steel, primary forms (672) and non-ferrous base metals

nes from the traditional, while pigment paints, etc. (533), agricultural machinery, excluding tractors (721), civil engineering equipments, etc. (723) and men's outer wear not knit (842) from the non-traditional sector.

The corresponding products in India are : meat, dried, salted, smoked (012), meat prepared, preserved nes (014), shell fish fresh frozen (036), wheat etc. unmilled (041), barley unmilled (043), spices (075), iron ore concentrates (281), materials of rubber (621), paper, etc. pre cut, arts of (642), non-ferrous base metals nes (689) from the traditional, while pigment paints, etc. (533), plastic materials, etc. (585), starch, insulin, gluten, etc. (592), other power generating machinery (718), furniture, parts thereof (821), men's outer wear not knit (842), meters and counters nes (873) and work of art etc. (893) from the non-traditional sector.

In Turkey such products are : cheese and curd (024), fish, etc. prepared preserved n.e.s. (037), wheat etc. meal or flour (046), vegetable etc. fresh simply preserved (054), vegetable etc. preserved (056), fruit preserved prepared (058), other crude materials (278), crude animal materials, n.e.s. (291), animal oils and fats (411), flour coverings, etc. (659), iron, steel primary forms (672), iron, steel shapes, etc. (673), copper excluding cement copper (682), zinc (686) from the traditional, while electro-medical X-ray equipment (774), under garment knitted (846), and meters and counters n.e.s. (873) from the non-traditional sector.

Further, dissimilarity in factor endowment among NICs for the products exported to developed and the world, whereas, similarity to the developing countries had also been discovered. A strong correspondance in terms of internal export-supply and that of external import-demand had also been portrayed among NICs. The study suggests block-wise intra-NICs trade cooperation.

The formation of trade cooperation is justifiable on the ground that most of NICs in their traditional and non-traditional commodities faced the fierce competition and thus efforts towards this direction, could possibly minimise, if not eliminate, the element of competition. Since most of NICs faced the oligopolistic market structure under kinked demand curve for marketing of their traditional and perfect competition for their non-traditional commodities would only imply that individual NICs is mearly a price-taker and, therefore, none of them is able to influence the given ruling price determined by the major industrialized countries. Hence, any efforts by any NICs would only result in to the cut-throat competition including price-war among themselves. This could be avoided by forming the intra-NICs trade blocks through cost reducing and price decisive measures. The consideration of block-wise intra-NICs trade cooperation is based on dynamic rather than static comparative advantage, which takes into account the changing pattern of comparative advantage, i.e. 1969-72 - 1974-76, 1974-76 - 1979-82 and to 1979-82 - 1984-87. In association with this, nature of

competition and commodity correspondence coefficients have also been considered.

Based on above considerations, as shown in Table-1, NICs have been classified into three distinct blocks, such as, (I) India, Argentina, Pakistan and Turkey, (II) Korea Republic and Israel and (III) Brazil and Malayasia. The formation of intra-NICs at 3 digit levels of SITC groupings, indicates that first block may specialise commodities with in food and live animals (0.0), and crude materials inedible except fuels (2.0), which may export to the rest of the blocks. Similarly, second block may specialize various commodities within manufactured goods classified by materials (6.0) and miscellaneous manufactured articles (8.0), which may export to rest of the blocks. Third block reciprocately may specialize various commodities with in animal vegetable oils and fats (4.0), chemicals (5.0) and machinery and transport equipment (7.0), which may export to the rest of the blocks.

II.1 Competitiveness and Trade Cooperation

Consideration of revealed comparative advantage is, however, not the sufficient basis for trade cooperation, which calls for the examination of export competitiveness. Export competitiveness implies the competitive ability of export country in terms of price and non-price factors in order to improve the exportability of a commodity in foreign market. Competitiveness of export has been examined by

applying the CMS model. In the CMS model (Tyzzynski 1951; Baldwin 1958; Spiegelglas 1959; Narvekar 1960; Kiyoshi 1962; Richardson 1971; Tiwari 1985; Tiwari 1996),   the total effect of price and non-price, internal and external factors on the export of a country is disentangled into four major components viz., (1) world trade effect, (2) commodity composition effect, (3) market distribution effect, and (4) the residual competitiveness effect.   The competitiveness effect arrived therefrom as the residual indicates the strength or weakness of the internal (domestic) policies. It is thus possible with the help of CMS model to distinguish the influence of external demand conditions and the internal factors as an explanation of the observed export performance.

In terms of analytical procedure, at the first stage all import markets and export products are "completely undifferentiated as to commodity and region of destination. That is to say, export is viewed as a single good destinated for a single market (Leamer 'et al.', 1970 : 173). This is called world trade effect, which is explained in terms of following identity:

$$\sum_{i=1}^{n} rX_i = rX \qquad \ldots\ldots\ldots\ldots \qquad (1)$$

Where X and X_i are respectively the total export and export of ith commodity group by the export-country at the

base year and r is percentage increase of total world export between two reference years. The number of export-products under consideration is represented by "n". In the present study the total number of products considered is n = 55.

At the second stage, export of the country is disaggregated into different commodity classes. It indicates the magnitude of concentration of export-commodity by the exporting country 'vis-a-vis.' the rest of the world. The favourable commodity composition effect implies that the exports "are concentrated in commodity classes with growth rates more favourable than the world average (Leamer 'et al.', 1970:174). Thus, if the increase of export by the exporting country is more than the world average, the sign of commodity composition would be positive, whereas, the vice-versa would be the result of the negative sign. "The positive sign would further indicate that the country had concentrated on the export of commodities whose world markets were growing relatively fast, while the negative sign would indicate that export-country had concentrated in slowly growing commodity markets" (Leamer 'et al.' 1970 :174). The effect of commodity composition has been presented in the following identity form:

$$\sum_{i=1}^{n} (r_i X_i - r X_i) = \sum_{i=1}^{n} r_i X_i - r X \quad \ldots \ldots (2)$$

Where, r_i is the percentage increase of the world export of the commodity group i, between two reference years. At the third stage, exports are disaggregated into different commodity classes and markets or groups of markets. The exercise, thus, would show the market distribution effect by comparing the geographical concentration of export of the exporting country in the specific commodity group 'vis-a-vis.' the rest of the world. A positive sign of market distribution effect indicates the comparative ability of a country to increase her export of commodity classes in the relatively growing markets, whereas, a negative sign shows the concentration of export for the similar commodity classes in the relatively stagnant markets (Leamer 'et al.', 1970:174). The effect of market distribution can thus be defined as:

$$\sum_{i=1}^{n} \sum_{j=1}^{m} rij \times ij - \sum_{i=1}^{n} rixi \quad \dots \ (3)$$

Where, rij is the percentage increase of the world export of the commodity group i in the jth market between two points of time. The number of import markets is represented by m. In the present study the number of market considered is m = 21.

At the final stage, after decomposing the export performance of a country into the three components viz; (1)

world trade effect, (2) commodity composition effect, and (3) market distribution effect attributable to foreign demand conditions, the residual is arrived at and attributed to the country's own competitiveness. The exercise thus involves the computation of the total export of the exporting country in the terminal year minus base year minus the total of (a) world trade effect, (b) commodity composition effect, and (c) market distribution effect. The residual competitiveness is the result of the interacting forces both from supply and demand, price and non-price but largely confined to domestic factors. The positive sign of residual indicates the improved position of export in terms of competitiveness 'vis-a-vis.' the rest of the world, whereas the negative sign reflects the deterioration in country's export due to fall in competitiveness (Leamer 'et.al.', 1970 : 180). The competitiveness effect is defined as here under:

$$(X' - X) - \sum_{i=1}^{n} \sum_{j=1}^{m} r_{ij} \; x_{ij} \qquad \ldots\ldots (4)$$

Where, X' and X are the actual export of the exporting country in the terminal as well as the base year respectively. The total number of export products and markets is represented respectively by (n) and (m). For specific export-commodity, the residual competitiveness (Leamer 'et al.', 1970:180) is defined as:

$$(X'_i - X_i) - \sum_{j=1}^{m} r_{ij} \times_{ij} \quad \ldots\ldots (5)$$

Where, X'_i and X_i are the export of the specific commodity in the terminal and the base year respectively. In the present study the number of specific commodity group is n=55.

It may be reiterated that the residual term captures the influence of both price and non-price factors. It reflects.... "differential rates of quality improvement and development of new export..... differential rates of improvement in the efficiency of marketing or in the terms of financing the sale of export goods and .... differential changes in the ability for prompt fulfilment of export orders" (Fleming 'et al.', 1958 : 218-245). Besides this, residual term also includes, to some extent, "the degree of discrimination (or preference)" "the import control policies of different countries which are outside of the scope of competitiveness" (Narvekar 1960 : 87). It may be noted that CMS model is an identity which does not have strong theoretical foundations. Also, as CMS model does not have a stochastic basis, it can not be considered useful for future projection for the market shares. Further, it also assumes the relative prices of export products as constant. Despite the above limitations, this model helps in identifying the areas wherein the export of a country may be expanded.

Applying the CMS model, analysis attempts to explain the role of external as well as the internal factors on the export performance. Analysis covers such periods as 1969-71-1979-81 and 1979-81 - 1985-87. The study covers traditional as well as non-traditional commodities at 1 digit level of SITC classification. The products covered are : (1) food and live animals (0.0), (2) beverages and tobacco (1.0), (3) crude materials inedible except fuels (2.0), (4) mineral fuels, lubricants and related materials (3.0), (5) animal, vegetable, oils and fats (4.0) and (6) manufactured goods classified by materials (6.0) from the traditional sector, while (7) chemicals (5.0), (8) machinery and transport equipment (7.0) and (9) miscellaneous manufactured articles (8.0) from the non-traditional sector. This is derived from 2 digit levels of SITC grouping, which in all consists 55 commodities.

Import-markets considered are 9 from the developed and 12 from the developing world. Countries selected include : USA, Japan, UK, France, Belgium, Canada, Germany FR, Switzerland and Italy from the developed, while India, Pakistan, Singapore, Hongkong, Malaysia, Korea Republic, Indonesia, Sri Lanka, Brazil, Thailand, Greece and Turkey from the developing world. Term 'world export' as defined traditionally is the summation of export from developed and developing countries minus export from each individual NICs. Selection of periods and import-markets is based on the

readily availability of information from secondary sources as discussed earlier.

We may discuss the role of external factors on export performance of NICs. At the country level, during 1969-71 to 1979-81, world trade effect (WTE) was found to be favourable in all NICs 'vis-a-vis.' rest of the world. Commodity composition effect (CCE) in all NICs except India was found favourable 'vis-a-vis.' rest of the world. In contrast to above, market distribution effect (MDE) was found unfavourable in all NICs except India 'vis-a-vis.' rest of the world. During 1979-81 to 1985-87, world trade effect (WTE) was found to be favourable in all NICs 'vis-a-vis.' rest of the world. Similarly, commodity composition effect (CCE) was found to be favourable in all except in Korea Republic 'vis-a-vis.' the rest of the world. The effect of market distribution effect (MDE) was found to be favourable in Argentina, Israel, Korea Republic, Malaysia, Pakistan and Turkey, whereas, unfavourable in Brazil and India 'vis-a-vis.' rest of the world.

At one digit level of SITC commodities, world trade effect (WTE) and commodity composition effect (CCE) in all traditional products, during 1969-71 to 1979-81, were found to be favourable in 7 NICs (Argentina, Brazil, Israel, Korea Republic, Malaysia, Pakistan and Turkey) 'vis-a-vis.' rest of the world. In India, however, the effect of commodity composition (CCE) in food and live animals (0.0) was found to be unfavourable 'vis-a-vis.' the rest of the world. The

market distribution effect (MDE) was found to be unfavourable in almost all traditional product categories 'vis-a-vis.' rest of the world. Exceptions were, however, only observed in food and live animals (0.0) in India and in crude materials inedibles except fuels (2.0) in Pakistan, where market distribution effect (MDE) turned out to be favourable 'vis-a-vis.' rest of the world. A similar pattern had also been followed in the non-traditional product categories as well. World trade effect (WTE) and commodity composition effect (CCE) were found to be favourable in majority of NICs 'vis-a-vis.' rest of the world in machinery and transport equipment (7.0) and in miscellaneous manufactured articles (8.0). Conversely, market distribution effect (MDE) was found to be unfavourable in almost all NICs 'vis-a-vis.' rest of the world in (1) machinery and transport equipment (7.0), (2) chemicals (5.0), and (3) in miscellaneous manufactured articles (8.0).

During 1979-81 - 1985-87, world trade effect (WTE) was found to be favourable in case of food and live animals (0.0) in all NICs, whereas, unfavourable in animal vegetable, oils and fats (4.0) in all NICs except Pakistan 'vis-a-vis.' rest of the world. As for the commodity composition effect (CCE), it was found favourable in food and live animals (0.0) in 5 NICs (Brazil, Israel, Korea Republic, Pakistan and Turkey); in mineral fuels, lubricants and related materials (3.0) in 6 NICs (Argentina, Brazil, India, Malaysia, Pakistan and Turkey); and in animal vegetable, oils and fats (4.0) in 5

NICs (Brazil, Israel, Korea Republic, Pakistan and Turkey) 'vis-a-vis.' rest of the world. Market distribution effect (MDE) was found favourable in manufactured goods classified by materials (6.0) and in crude materials, inedible except fuels (2.0) in all NICs; in beverages and tobacco (1.0) in 6 NICs (India, Israel, Korea Republic, Malaysia, Pakistan and Turkey); in food and live animals (0.0) in 4 NICs (Argentina, Brazil, India and Malaysia); and in animal vegetable, oils and fats (4.0) in 4 NICs (Argentina, India, Malaysia and Turkey) 'vis-a-vis.' rest of the world.

Within the non-traditional sector, world trade effect (WTE) was found to be favourable in majority of products and NICs 'vis-a-vis.' the rest of the world. A similar was also the case for commodity composition effect (CCE). However, there was a unfavourable effect of commodity composition (CCE) in chemicals (5.0) in 4 NICs (Korea Republic, Malaysia, Pakistan and Turkey); in machinery and transport equipment (7.0) in Turkey; and in miscellaneous manufactured articles (8.0) in Korea Republic 'vis-a-vis.' rest of the world. As far the market distribution effect (MDE), it was found favourable in chemicals (5.0) in 6 NICs (Argentina, Israel, Korea Republic, Malaysia, Pakistan and Turkey); and in machinery and transport equipment (7.0) in 5 NICs (Brazil, Israel, Korea Republic, Malaysia and Turkey) 'vis-a-vis.' rest of the world. However, market distribution effect (MDE) was found to be unfavourable in miscellaneous manufactured

articles (8.0) in 5 NICs (Argentina, Brazil, India, Israel and Pakistan) 'vis-a-vis.' rest of the world.

As far the contribution of internal factors on export performance of NICs is concerned, the competitiveness effect (CE) at the country level during 1969-71 to 1979-81 was found to be favourable in Brazil, Israel, Korea Republic and Malaysia, whereas, unfavourable in Argentina, India, Pakistan and Turkey 'vis-a-vis.' rest of the world. During 1979-81 to 1985-87, competitiveness effect (CE) was found to be favourable in all NICs except Argentina 'vis-a-vis.' rest of the world.

At one digit level of SITC commodities, during 1969-71 - 1979-81, competitiveness effect (CE) within the traditional sector was found to be favourable in important product groups, such as, manufactured goods classified by materials (6.0) in 4 NICs (Argentina, Brazil, Israel and Korea Republic); food and live animals (0.0) in 3 NICs (Brazil, Korea Republic and Malaysia); and beverages and tobacco (1.0) in 4 NICs (Argentina, Brazil, Korea Republic and Malaysia) 'vis-a-vis.' rest of the world. As far the non-traditional sector, competitiveness effect (CE) was found to be favourable in majority of product groups and NICs, such as chemicals (5.0) in 5 NICs (Argentina, Brazil, Israel, Korea Republic and Turkey); machinery and transport equipment (7.0) in all NICs except Pakistan; and miscellaneous manufactured articles (8.0) in all NICs excepting Argentina and Brazil 'vis-a-vis.' rest of the world.

During 1979-81 - 1985-87, it is satisfying that competitiveness effect (CE) with in the traditional sector has been found to be favourable in manufactured goods classified by materials (0.0) in all NICs; crude materials inedible except fuels (2.0) in 5 NICs (Brazil, India, Korea Republic, Malaysia and Pakistan); and animal vegetable oils and fats (4.0) in 5 NICs (Argentina, Brazil, Israel, Malaysia and Pakistan) 'vis-a-vis.' rest of the world. Within the non-traditional sector, competitiveness effect (CE) has been found to be favourable in all product groups, such as, miscellaneous manufactured articles (8.0), machinery and transport equipment (7.0) and chemicals (5.0) in majority of NICs 'vis-a-vis.' rest of the world.

Since analysis 'per-se.', would likely to involve the aggregation bias, the study examines the competitiveness (CE) at two digit levels of SITC commodities. During 1969-71 - 1979-81, a majority of products within the traditional sector was found with favourable competitiveness effect (CE) in Brazil, Israel, Korea Republic, Malaysia and Turkey, where as, unfavourable competitiveness effect (CE) was revealed in Argentina, India and Pakistan 'vis-a-vis.' rest of the world. Within the non-traditional sector, more or less, the similar pattern was also found true in all NICs, except in Malaysia and Pakistan, which portrayed the negative competitiveness effect (CE) 'vis-a-vis.' rest of the world. Although large number of poducts portrayed the favourable competitiveness effect both in traditional and the non-traditional sectors,

but it was found relatively more substantial in the former than that in the later product categories.

During 1979-81 - 1985-87, there was a favourable competitiveness effect (CE) in Brazil, Israel, Korea Republic and Malaysia for the traditional sector products. A similar was also the case in Brazil, Israel, Korea Republic, Malaysia, Pakistan and Turkey for the proucts under the non-traditional sector. However, between the traditional and the non-traditional products, the competitiveness effect (CE) was found to be more favourable in the former than that in the later product categories. The competitiveness effect (CE) over the periods, as shown in Table-2, was found to be more favourable and substantial in the traditional products than that in the non-traditional product groups.

The nature of competitiveness effect (CE) as reflected by the residual in CMS model tends to mainly indicate the role of internal production and trade policies of the export-cuntry. In this context, it has been found that favourable competitiveness effect (CE) observed in most of the traditional and non-traditional product groups but in important ones has mainly been on account of labour cost advantages, conducive production and trade policies and the various policy stimuli extended by the NICs under the New Economic Policy. On the other hand, unfavourable competitiveness effect in product groups and NICs has mainly been due to the material cost disadvantages, fall in price competitiveness and the high tariff and non-tariff barriers.

The formation of block-wise intra-NICs trade cooperation has been considered. This is based on the favourable competitiveness effect (CE) in each NICs 'vis-a-vis.' the rest of the world during 1979-81 to 1985-87 at two digit levels of SITC commodities. Among the traditional sector, as shown in Table-3, first block (Argentina and Korea Republic) may export various products from crude, materials, inedible except fuels (2.0) and animal vegetable oils and fats (4.0) to the rest of the blocks. Second block (Brazil, India, Israel and Turkey) may export products from food and live animals (0.0) and mineral, fuels, lubricants and related materials (3.0) to the rest of the blocks. Reciprocately, third block (Pakistan and Malaysia) may export various products from manufactured goods classified by materials (6.0) to the rest of blocks. Similarly, among the non-traditional sector, first block (Argentina, Turkey and Korea Republic) may export various products from miscellaneous manufactured products (8.0) to the rest; second block (Brazil, India and Israel) products from machinery and transport equipment (7.0) to the rest; and third block (Pakistan and Malaysia) products from chemicals (5.0) to the rest of the blocks.

III. Implications for Policy

Present study is not without policy relevance. To the extent export performance of NICs and developing countries

lagged behind to that of the developed market economies calls for the following policy considerations: First, export-commodities with large export potential need to be identified and then concerted efforts are required to be made to overcome the internal supply bottlenecks, such as, inadequate infrastructural supports, untimely and inadequate supply of raw materials, reduction in cost per unit of output, poor packing, inefficient marketing strategy, etc. Second, more effective trade regime needs to be followed in NICs to enhance their exports through providing more result oriented package of export augmenting incentives in terms of tariff cuts, high subsidies, etc.

Thus, export incentives and schemes are needed to be restructured on a selective and discriminatory basis to enhance their proper utilization for efficient exports. Simultaneously, export incentives, having counter productive effect on export expansion, are required to be immediately withdrawn. Here, it would be essential to see that advantages of such measures are only availed for promoting the efficient export-products rather than trading of incentives. And third, bureaucratic control generally involving undue procedural delay needs to be kept at minimum level. Although, some attempts have already been made under the New Economic Policy in market determined approach, but more effective attempts are still required to be made to make the products of NICs cost effective and their exports internationally competitive.

The policy measures outlined above would be more effective if specialisation of commodities is also taken into consideration. To the extent some NICs are found with revealed comparative advantage in principal traditional commodities on account of labour cost advantages and that in non-traditional commodities to the trade regime, policy incentives need to be selective and discriminatory in consistent with specific market orientation. Since most of NICs are found facing oligopolistic market competition and that export-supply has matched well with import-demand structure, intra-NICs trade cooperation as suggested by specialisation criterion would be useful and rewarding.

Besides efficiency, formation of intra-NICs trade cooperation on the basis of competitiveness would also be an essential step for enhancing the trade among NICs. This may be further strengthened if the knowledge about information on technological capability, adoptibility and innovativeness, product development, industrial and financial policies is equiproportionately shared by NICs for their mutual benefit. These are some of the policy recommendations which would likely to serve as a fundamental basis for enhancing intra-NICs trade and cooperation.

R.S. Tiwari
Giri Institute of Development Studies
Sector O, Aliganj Housing Scheme
Lucknow - 226 024

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Table-1: <u>Intra-NICs Block 'vis-a-vis.' Export-Commodities Based on Dynamic</u>

<u>Revealed Comparative Advantage</u>

Intra-NICs block	Export-Commodities
I	
India, Argentina, Pakistan and Turkey	Meat, fesh, chilled, frozen (011); Wheat etc. unmilled (041); Barley unmilled (043); Maize unmilled (044); Wheat etc. meal or flour (046); Vegetable etc. fresh simply preserved (054); Tea and mate (074); Spices (075); Hides, skins etc. furs raw (211); Seeds for other fixed oils (223); Fuelwood and charcoal (241); Cotton (263); and Sulpher, unroasted, iron phyrites (274).
II Korea Republic and Israel	Woven man-made fabric (653); Lime, cement, building products (661); Mineral manufactures nes (663); Pearl, precious, semi precious stone (667); Iron and steel casting unworked (679); Copper, excluding cement copper (682); Wire products non-electric (693); Steel copper nails, nuts etc.(694); Tools (695); Base metal household equipment (697); Travel goods, hand bags (831); and Footwear (851).
III Brazil and Malaysia	Fixed vegetable oil, non-soft (422); Processed animal vegetable oil etc. (431); Carboxylic acids, etc. (513); Nitrogen function compounds (514); Perfumery cosmetics etc. (553); Products of condensation etc. (582); Steam engines, turbines (712); Other power generating machinery (718); and Machines, nes, non-electric (719).

Source : United Nations, <u>Commodity Trade Statistics</u>; United Nations, <u>Year Book of International Trade Statistics</u>, DGCI&S, Calcutta, <u>Monthly Statistics of Foreign Trade of India</u>, Various issues.

Table-2 : <u>Changes in Positive and Negative Competitiveness Effect in Traditional and Non-Traditional Sectors in Newly Industrialising Developing Countries : 1969-71 - 1979-81 and 1979-81 - 1985-87</u>

Period	Traditional Sector				Non-Traditional Sector			
	Positive competiti-veness effect		Negative competiti-veness effect		Positive competiti-veness effect		Negative competi-tiveness effect	
	Products (No.)	Values (1000'US$)	Products (No.)	Values (1000'US$)	Products (No.)	Values (1000'US$)	Products (No.)	Values (1000'US$)
1969-71 - 1979-81	15	9680.89	18	-14244.95	10	12809.59	5	-3272.30
1979-81 - 1985-87	18	29994.07	15	-18085.76	15	18859.59	10	-7818.42
(% change in 1979-81 - 1985-87 over 1969-71 - 1979-81)	20.00	209.83	-16.67	26.96	50	47.23	100.00	138.93

Source : United Nations, <u>Commodity Trade Statistics</u>; United Nations, <u>Year Book of International Trade Statistics</u>; DGCI & S, Calcutta, <u>Monthly Statistics of Foreign Trade of India</u>, Various issues.

Table-3 : <u>Intra-NICs Block Formation 'vis-a-vis.' Export Commodities Based on</u> <u>Favourable Competitiveness Effect</u> : <u>1979-81 - 1985-87.</u>

Block of exporting countries	Export - Commodities	Import - countries
	A - <u>Traditional Sector</u>	
I Argentina and Korea Republic	Cork and Wood (24);Pulp and waste paper(25); Crude fertilizers, minerals, n.e.s. (27); Metalliferrous ores, scrap (28); Crude animals, vegetables, materials (24); Gas, natural and manufactured (34); Fixed vegetable, oil, fats (42); and Processed animal vegetable oils (43).	1. Brazil, 2. India, 3. Israel, 4. Pakistan, 5. Malaysia and 6. Turkey.
II Brazil, India, Israel and Turkey	Fish and preparations (03); Cereals and preparations (04); Vegetable and fruits (05);Sugar and preparations and honey (06); Miscellaneous edible products (09); Coal coke and brequettes (32); and Petroleum and products (33).	1. Argentina, 2. Korea Republic, 3. Malaysia and 4. Pakistan.
III Pakistan and Malaysia	Rubber manufacturers (62); Wood, Cork manufacturers (63); Paper, paper board and manufacturers (64); Non-metal minerals manufactures, n.e.s. (66) and Metal manufactures (69)	1. Argentina, 2. Korea Republic, 3. Brazil, 4. India, 5. Israel and 6. Turkey

Table-3 (contd....)

Block of exporting countries	Export - Commodities	Import - countries

B - Non-Traditional Sector

I

Argentina, Turkey and Korea Republic

Travel goods and hand bags (83); Plumbing, heating, lighting equipment (81); Clothing (84); Footwear (85); and Miscellaneous manufactured goods (89).

1. Brazil,
2. Israel,
3. India,
4. Korea Republic and
5. Pakistan.

II

Brazil, India and Israel

Machinery for special industries (72); General industrial machinery (74); Telecommunication, Sound equipments (76); and Road vehicles (78).

1. Argentina,
2. Malaysia
3. Turkey,
4. Korea Republic and
5. Pakistan

III

Pakistan and Malaysia

Inorganic chemicals (52); Dyes, tanning, colour products (53); Medicinal, pharmaceutical products (54); Fertilizers manufactured (56); Plastic materials, n.e.s. (58); and chemical materials, n.e.s. (59)

1. Argentina,
2. Malaysia,
3. Turkey,
4. Brazil,
5. India and
6. Israel

Source : United Nations, Commodity Trade Statistics; United Nations, Year Book of International Trade Statistics, DGCI & S, Calutta, Monthly Statistics of Foreign Trade of India, Various issues.